

POWER RANGE

420-440W

HNM7-UHLDD108 Series

Houen Solar 16BB HALF-CELL Bifacial Double Glass
Monocrystalline N - TYPE Solar Module

KEY FEATURES



Excellent Cells Efficiency

SMBB technology reduce the distance between busbars and finger grid line which is benefit to power increase.



Anti PID

Ensured PID resistance through the quality control of cell manufacturing process and raw materials.



Bifacial Technology

Up to 25% additional power gain from back side depending on albedo.



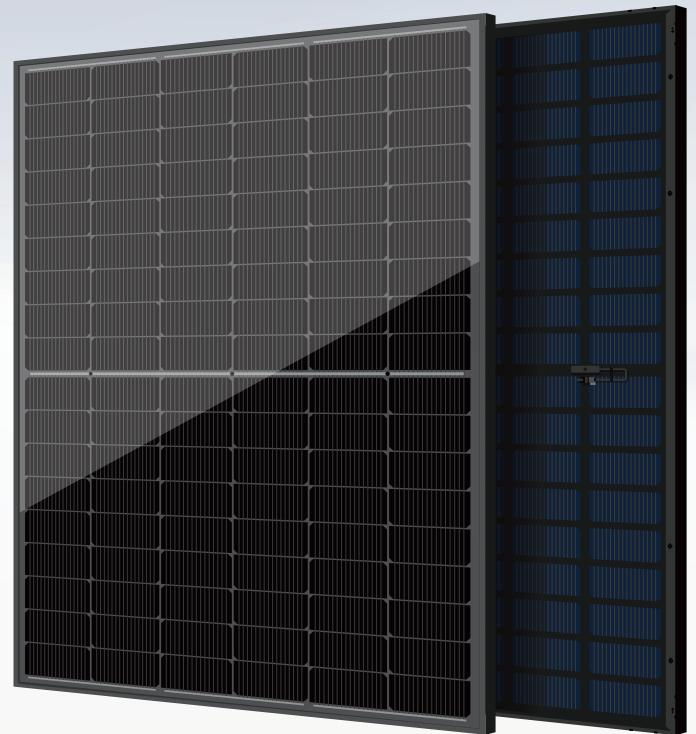
Better Weak Illumination Response

More power output in weak light condition, such as haze, cloudy, and early morning.

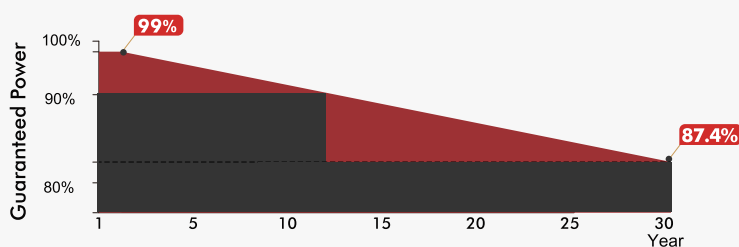


Adapt To Harsh Outdoor Environment

Resistant to harsh environments such as salt, ammonia, sand, high temperature and high humidity environment.



LINEAR PERFORMANCE WARRANTY



WARRANTY



12 YEARS
Product
Warranty



30 YEARS
Power
Warranty

SYSTEM AND PRODUCT CERTIFICATIONS:

IEC61730, UL61730

ISO9001:2015: Quality Management System

ISO14001:2015: Environment Management System

ISO45001:2018 Occupational health and safety management systems



440W

MAXIMUM POWER OUTPUT

22.53%

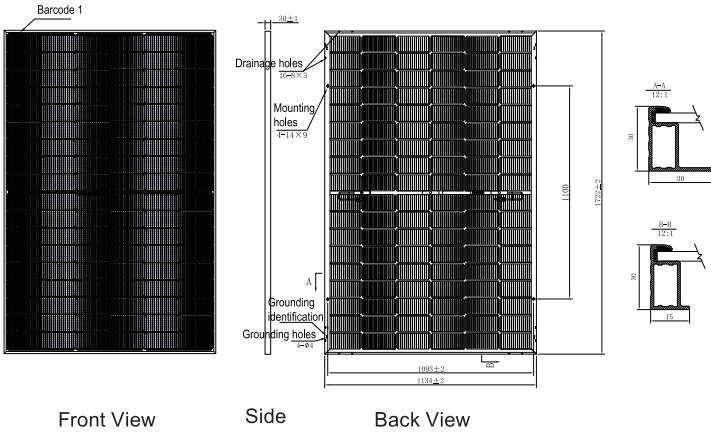
MAXIMUM EFFICIENCY

80±10%

BIFACIALITY

DIMENSIONS OF PV MODULE

Unit: mm



*Customized frame color available upon request.

MECHANICAL DATA

Solar cells	Mono N-Type
Number of cells	108 (6x18)
Module dimension	1722x1134x30 (With Frame)
Weight	24.5±1kg
Glass	2.0 mm+2.0mm, High Transmission, AR Coated Heat Strengthened Glass
Junction Box	IP68, 3 diodes
Cables	4 mm ² , 1200mm (With Connectors)
Connectors	MC4-EVO2

PACKAGING CONFIGURATION

Container	40'HQ
Piece/Box	36
Piece/Container	864

*Customized packaging is available upon request.

ELECTRICAL CHARACTERISTICS

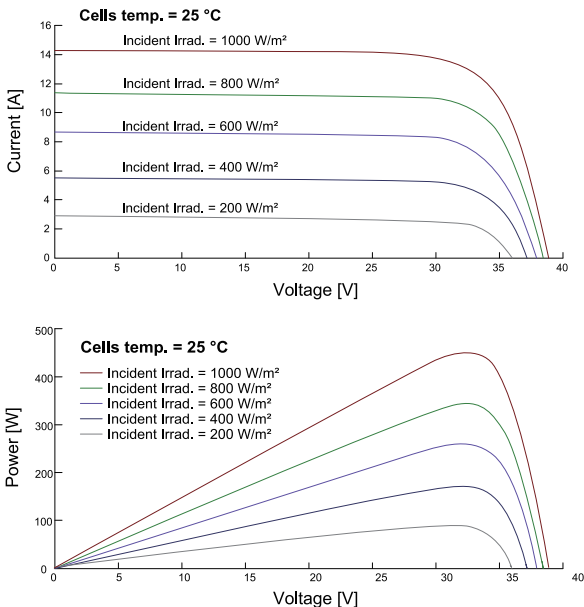
Module Type	HNM7-UHLLDD108-420/M		HNM7-UHLLDD108-425/M		HNM7-UHLLDD108-430/M		HNM7-UHLLDD108-435/M		HNM7-UHLLDD108-440/M	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Nominal Power Watt Pmax(W)*	420	318.70	425	322.30	430	326.00	435	329.80	440	333.50
Maximum Power Voltage Vmp(V)	31.50	29.50	31.70	29.70	31.90	29.90	32.10	30.00	32.30	30.20
Maximum Power Current Imp(A)	13.34	10.81	13.41	10.86	13.48	10.92	13.56	10.97	13.63	11.03
Open Circuit Voltage Voc(V)	38.00	35.90	38.20	36.10	38.40	36.30	38.60	36.40	38.80	36.60
Short Circuit Current Isc(A)	14.11	11.39	14.18	11.44	14.25	11.50	14.32	11.56	14.39	11.61
Module Efficiency (%)	21.51		21.76		22.02		22.28		22.53	

*The data above is for reference only and the actual data is in accordance with the practical testing
 *STC (Standard Test Condition): Irradiance 1000W/m², Module Temperature 25±2C, AM 1.5.
 *NMOT: Irradiance 800W/m², Ambient Temperature 20C, AM 1.5, Wind Speed 1m/s.
 *Measuring uncertainty: ±3%, Power tolerance: ±3%

*Electrical data in this catalog do not refer to a single module and they are not part of the offer.
 *They only serve for comparison among different module types.
 *All the electrical characteristics such as Im, Vm, Isc, Voc and FF are within ±5% tolerance.

I-V & P-V CURVES

(430W)



BIFACIAL OUTPUT-REAR SIDE POWER GAIN

		441	446	452	457	462
5%	Maximum Power (Pmax)	441	446	452	457	462
	Maximum Efficiency STC (%)	22.58	22.85	23.12	23.39	23.66
15%	Maximum Power (Pmax)	483	489	495	500	506
	Maximum Efficiency STC (%)	24.73	25.03	25.32	25.62	25.91
25%	Maximum Power (Pmax)	525	531	538	544	550
	Maximum Efficiency STC (%)	26.89	27.21	27.53	27.85	28.17

WORKING CONDITIONS

Maximum System Voltage	1500VDC
Operating Temperature	-40C~+85C
Maximum Fuse Rating	30A
Rear Side Mechanical Load	2400Pa
Front Side Mechanical Load	5400Pa
Safety Class	Class II

TEMPERATURE RATINGS

NMOT	44C±2C
Temperature coefficient of Pmax	-0.30%/C
Temperature coefficient of Voc	-0.25%/C
Temperature coefficient of Isc	0.046%/C
Refer. Bifacial Factor	80±10%

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